

Reforming Money and Banking

How a Full-Reserve, Interest-Free System Can Eliminate Government Debt, Deficits, and Inflation

Written by:	Syeda Mifraah Tahir
E-mail:	mstahir.2906@gmail.com
University:	NED University of Engineering and Technology
Department:	Electrical Engineering
Degree Program:	Bachelors of Engineering (BE)
City:	Karachi

Abstract:

The global economy is experiencing persistent instability marked by slow growth, rising inflation, high debt levels, and widening inequality. A major cause of these challenges is the structural weakness of the current fractional-reserve banking system, which enables excessive debt creation, inflation and instability in the economy. This paper examines the evolution of the global financial system, highlights the limitations of fractional-reserve banking, and presents full-reserve banking as a feasible alternative. It further delves into Islamic banking and how its principles align with a full-reserve framework. This paper explores how a full-reserve system can tackle challenges such as debt-based money creation and liquidity risk in Islamic banking and how integrating full-reserve system with Islamic banking can promote financial stability, transparency, and economic justice.

Introduction:

The world is facing a global economic crisis, characterized by slow growth, rising inflation, high trade costs, increasing inequality, high global debt levels and persistent geopolitical tensions. The global growth is expected to decline from 3.3% in 2024 to 2.9% in 2025 and 2026 with GDP growth in U.S. predicted to decline significantly [1]. Ongoing trade issues have given a rise to inflation, with developing countries being the most vulnerable. Furthermore, the global debt crisis, which is at high records, is a great threat to the global economy. There are several key factors which contribute to the deteriorating economic situation but one key cause is the inefficiency of the financial system worldwide i.e. the current banking system. After the pandemic of COVID-19, the pre-existing limitations of the banking system came to light, and highlighted the risks involved in the system that can become a threat for the economy.

These limitations have been addressed by many economists and many solutions have been discussed on the global platform. An alternative to the current conventional banking is the Islamic banking, which can be implemented based on a full-reserve and interest free system. A full-reserve, interest-free banking system can eliminate government debt, deficits and inflation and improve the condition of the global economy.

The Current Financial System

In order to understand the current financial system, we must first understand the concept of economy and evolution of banking systems. Economic thought has evolved and grown with the evolution of the world. The 18th and 19th century was the era of Capitalism, in this era, classical economics was presented by Adam Smith, the father of modern economy [2], who argued that government interference in economy should be minimal and proposed that markets naturally prevail due to public's self-interest. At the time, banks were private institutions that stored deposits, enabled trade and provide credit to the government and industries.

The banks mainly operated on fractional-reserve system, however the system was weak and bank runs were frequent.

In 1880, the concept of Socialism was presented by Karl Marx in direct opposition of Capitalism in which the economy was controlled the government [2]. This system prevailed in Russia, China and Eastern Europe. The banks became state-owned and functioned as instruments of central planning. Bank runs stabilized, but at the cost of decline in productivity as there was a lack of innovation which resulted in the financial instability, particularly in Russia.

After the Great Depression in 1929, thousands of banks in the U.S. and Europe collapsed. As reform, Keynesianism was proposed by John Maynard Keynes who stated that government involvement is necessary along with individual interest [2]. He also emphasized on the need of social security institutes in times of recession to support the struggling economy. This system ended around 1970s due to rise in oil rates which resulted in high inflation and unemployment.

In 1980s, Neoliberalism and Monetarism were introduced which are still in practice [2]. This system states three main roles of government, namely security, dispute resolution and regulation of money supply and forbids any further government intervention in the economy. As a result, the banks regained and expanded their power and autonomy. However, the limitations of the current system were highlighted after the Great Recession of 2007 and the recent global pandemic of COVID-19 in 2020.

The current financial system, on a fundamental level, works on the principle of fractional-reserve system. As per this system, the commercial banks keep only a fraction of customer deposit and lend out the rest to borrowers or invested in businesses and charge interest on loan. The fraction-reserve varies from country to country. For example, if the reserve requirement in a country is 5%, the banks can lend out 90% of the deposit. Consider a person deposits 100,000\$ in a bank. The bank then keeps 5% of the money (5000\$) and lends out 95,000\$ to a borrower. Let's assume the borrower spends the money to pay a debt, the paid money is again stored in some other bank which then keeps the reserve and lends out 90,250\$ to another borrower. This is known as the multiplier effect. In this way, banks are able to create money out of thin air.

There are two types of money with reference to fractional-reserve system. Banknotes; the physical currency issued by central banks which only makes up a small portion of total money supply as transactions mainly depend on deposit money which is the second type of money. The deposit money is the new money created by banks whenever they issue loans. The bank guarantees to convert deposit money into banknotes on demand even though it holds only a fraction of the total amount. Therefore, this function only runs smoothly as long as withdrawals don't exceed the reserve ratio and public trust is maintained.

Limitations of Fractional-Reserve Banking

The fractional-reserve banking system has been strongly criticized by many economists due to its structural instability and risk of bank runs and inflation. This system has also been questioned on moral basis and even considered fraudulent due to the practice of creating non-currency money [3]. Fractional-reserve banks are fundamentally unstable because they create money based on customer trust and bank runs are inevitable if the depositors lose their trust in them. An example of this situation was witnessed during the Great Depression in United States, where New York Bank of U.S. collapsed as customers withdrew all their funds at the same time [4].

Another major drawback of this system is that it contributes to inflation. As deposit money expands, the currency devalues and as a result, prices of goods and services rise. Hence inflation occurs when money supply grows faster than economy's production growth. This surge of inflation was observed during the

pandemic in 2021 where many countries reached peak inflation levels. Fractional-reserve also causes debt saturation as total debt increases faster than income and as a result the economic output is used to pay the interests. Pakistan is one of the economies struggling with high debt levels. The government borrows loans from public banks to pay interest, as a result government debt increases and by paying interest money, deposit money rises. This cycle has been repeating for decades [5].

Finally, this system contributes to wealth inequality through money creation. The deposit money created by banks is typically accessed by individuals with sufficient collateral, large corporations or government. This new money is invested in assets (stocks or real estate), resulting in an increase in the value of these assets. By the time lower class gets access to money, inflation has already begun to rise. Hence the rich get richer while working class and lower-income individuals face economic distress. Famous economist John Maynard Keynes states: “By this means (fractional-reserve banking) government may secretly and unobserved, confiscate the wealth of the people, and not one man in a million will detect the theft.” [6]

Full-Reserve Banking – A Solution to Global Economic Crisis

Full-reserve banking is a banking system where banks are only allowed to lend time deposits (deposits stored for a set period) instead of demand deposits (customer deposits or savings). Unlike fractional-reserve banks, full-reserve banks are required to keep the complete amount of customer deposits that are available for immediate withdrawal. This system was proposed by the American economist, Irving Fisher in 1935 as a response to the Great Depression [7]. However, this system was not recognized as Keynesianism was gaining prominence at the time. After the 2008 financial crisis followed by the Great Recession, full-reserve banking gained popularity among economists and monetary reformers [7]. Shortcomings of fractional-reserve system; debt accumulation, economic inequality and risk of bank runs were highlighted and many economists suggested to implement the full-reserve banking system. The chief economist at Financial Times, Martin Wolf supported full-reserve banking by declaring that this system will prove to be extremely beneficial [7]. Nobel prize winner American economist, Milton Friedman also wrote in favor of 100% reserve banking. In his book, A Program for Monetary Stability, he recommends full-reserve banking as an ideal system that ensures economic stability [7] [8].

In full-reserve banking, commercial banks are no longer allowed to create credits by giving out loans, instead, the task of money creation is assigned to the government-backed central bank. Currently, banks perform two main jobs at once; storing deposits for customers, and investment to earn profit. These two tasks are opposite to each other. Full-reserve banking solves this by splitting these tasks into two distinct functions [7]:

Custody and Transaction services: Banks create transaction accounts that hold 100% of customer deposits in cash that can be withdrawn anytime. These accounts are legally separated from other bank activities. Therefore, banks can no longer create new money and the risk of bank runs is essentially removed. Furthermore, it minimizes the potential risk of inflation by halting the expansion of money supply.

Investment Intermediation: Banks act as true financial intermediaries between savers to borrowers. Investment accounts are created with fixed terms for withdrawal. These accounts can be used for lending as well as investment purposes. The depositors agree to place money at risk in these accounts in exchange for a return while borrowers receive existing funds, not newly created money. In this structure, if losses occur, the risk would be mutually shared between both parties, hence maintaining market discipline.

In short, full-reserve banking is an ideal system that assigns banks the role of money management and not money-creation, promoting transparency in the system. It aims for the creation of a safer and more stable financial framework where money is a reliable and government-backed medium of exchange.

Islamic Banking and Full-Reserve System

Even though conventional banking is the most followed system worldwide, it is not the only prevailing system. Islamic banking is another system that is strongly implemented not only in Muslim-majority countries including Saudi-Arabia, UAE, Kuwait, Qatar, Indonesia, Malaysia, Turkey, Pakistan, Bangladesh but also in Non-Muslim majority countries like UK and China [9]. Today, Islamic banking is a prominent global industry with \$8.94 billion worth finance market as of 2025 [10].

The main principles of Islamic banking are prohibition of riba (interest), risk sharing, asset-backed financing and transparency and fairness. However, there are several key issues facing the Islamic banking system. Two main issues and their solution based on full-reserve banking are explained below.

Islamic banking has been criticized on replicating conventional debt structures under different contractual names. The Islamic finance methods, Murabaha and Ijara, where banks buy an asset and resell it to a customer at a higher price (cost + profit), are criticized by scholars and declared to be forms of riba (interest) [11]. Critics argue that economic outcome for customers is similar to conventional loan. Even though Islamic banks avoid interest, in practice, they still accept demand deposits and keep fractional reserves, this is because they are still being operated under a system that runs on interest. This issue can be overcome by incorporating full-reserve banking which eliminates money creation through debt, removing a major source of instability and aligning with the Islamic law of Amanah (trust) [11].

Another major issue faced by Islamic banks is liquidity management where much of depositor money is tied up in long term financing [13]. The asset contracts, such as Murabaha and Ijara contracts cannot be converted into cash on demand. In addition, Islamic banks cannot use interest-based solutions used by conventional banks to manage short-term cash requirements, which makes it difficult for them to deal with sudden withdrawals. By incorporating full-reserve banking, this will no longer be an issue as complete reserves would be available at banks at all times. Since financing is only done through investment accounts, it aligns with the Islamic principle of risk-sharing and fairness [14].

Conclusion

The current global financial system, built on fractional-reserve banking, has demonstrated structural instability multiple times which has led to inflation, debt accumulation, wealth inequality and financial crises. While various solutions have been proposed, none of them have been able to address the main issue of money creation through debt. However, full-reserve banking system is a model that offers a structurally stable solution by separating money storage from investment, reducing the risk of bank runs significantly. This system is well-suited to be adopted by the Islamic banking system as it aligns with the principles of operation of Islamic banks and offers solutions to the limitations of Islamic banking system. In conclusion, adopting a full-reserve, interest-free banking system has the potential to strengthen both Islamic and the global finance, leading to a stable, transparent and equitable economy.

References

- [1] "Global economic outlook shifts as trade policy uncertainty weakens growth," 3 June 2025. [Online]. Available: <https://www.oecd.org/en/about/news/press-releases/2025/06/global-economic-outlook-shifts-as-trade-policy-uncertainty-weakens-growth.html>.

- [2] "History of economic thought," [Online]. Available:
] https://en.wikipedia.org/wiki/History_of_economic_thought.
- [3] M. Tacanho, "Fractional Reserve Banking Is Fraudulent and Ruinous," 7 February 2024. [Online].
] Available: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4719792.
- [4] S. Nevil, "Understanding Fractional Reserve Banking: How It Fuels Economic Growth," 9 September
] 2025. [Online]. Available:
<https://www.investopedia.com/terms/f/fractionalreservebanking.asp#:~:text=While%20this%20proces%20helps%20optimize,by%20all%20depositors%20are%20unlikely..>
- [5] Q. Khalilullah, "Full reserve banking: Part – I," 9 May 2024. [Online]. Available:
] <https://www.thenews.com.pk/print/1186811-full-reserve-banking-part-i>.
- [6] "Gracious Quotes," 2 December 2023. [Online]. Available: <https://graciousquotes.com/john-maynard-keynes/>.
- [7] "Full-reserve banking," 9 November 2025. [Online]. Available: https://en.wikipedia.org/wiki/Full-reserve_banking.
- [8] "A Program for Monetary Stability," 16 October 2024. [Online]. Available:
] https://en.wikipedia.org/wiki/A_Program_for_Monetary_Stability.
- [9] C. Domat, "Islamic Finance: Just For Muslim-Majority Nations?," 1 August 2024. [Online].
] Available: <https://gfmag.com/banking/islamic-finance-just-muslim-majority-nations/>.
- [1] E. Tarver, "Islamic Banking: Definition, History, and Example," 5 May 2025. [Online]. Available:
0] <https://www.investopedia.com/terms/i/islamicbanking.asp#:~:text=The%20global%20Islamic%20banking%20and,3>.
- [1] "Issues in Islamic banking," 9 February 2009. [Online]. Available:
1] <https://www.dawn.com/news/967419/issues-in-islamic-banking>.
- [1] Q. Khalilullah, "Full reserve banking: Part - III," 11 May 2024. [Online]. Available:
2] <https://www.thenews.com.pk/print/1187636-full-reserve-banking>. [Accessed December 2025].
- [1] S. A. Shaikh, "Liquidity Risks in Islamic Banks," 24 February 2024. [Online]. Available:
3] <https://islamic-economicsproject.com/2024/02/24/liquidity-risk-islamic-banking/>. [Accessed December 2025].
- [1] A. Fathurrahman and F. H. Nahar, "Full Reserve System and Islamic Banking System Proposal: A
4] Comparative Study of Fractional Reserve Free-Banking Theory," 1 April 2024. [Online]. Available:
<https://ejournal.iaisyarifuddin.ac.id/index.php/iqtishoduna/article/view/2321>. [Accessed December 2025].